Utah school-age hearing screening protocol

The goal of a successful school hearing screening program is to identify children who may be deaf or hard of hearing, which in turn leads to appropriate referrals for further audiological and/or medical evaluation. Early identification of hearing loss and appropriate management can improve a child's language & cognitive development, and educational performance (Yoshinaga-Itano, 1995). While the universal newborn hearing screening program has proven successful in early identification of hearing loss in children, there is a continued **need for early childhood and school-aged hearing screening due to late-onset and progressive hearing loss**, as well as fluctuating conductive hearing loss due to middle ear fluid. Unidentified hearing loss may impact a student's overall academic achievement, communication, and social-emotional development. **School hearing screening is required by law** in Utah Code **53G-9-402.** IDEA Part B Child Find includes hearing screening to identify students with a disability so they can receive a free appropriate public education (FAPE).

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School-age is defined as:

a) Any young child, ages 3-5 years old, enrolled in Part B preschool services
b) Any student ages 5-21 years old

Late-onset or progressive hearing loss may occur due to the follow risk factors:

- NICU > 5 days
- Family history of hearing loss in childhood and genetic disorders, such as Connexin 26 mutations
- Non-syndromic progressive sensorineural hearing loss
- Infectious diseases such as Cytomegalovirus (in utero), meningitis or measles
- Syndromes associated with hearing loss such as Down, Usher, Waardenburg, etc.
- Craniofacial anomalies (cleft lip/palate; atresia; microtia)
- Disorders such as enlarged vestibular aqueduct
- Exposure to loud noise or music (dependent upon intensity and duration of noise/music exposure)

Who should be screened for hearing loss?

- All students new to the school district
- **Annually, all students from Kindergarten to 3rd grade**
- **All students in the 7th grade**
- **All students in the 11th grade**
- New entrants to school who do not have records of passing a hearing screening
- Annually, **all students in a special education program** (including **Part B preschool services**)
- Any student in which parent or school personnel suspect a hearing loss

Utah Department of Health and Human Services
Office of Children with Special Healthcare Needs
801-273-6600 ehdi@utah.gov

Who should not be screened for hearing loss?

- Any student who wears hearing aids or cochlear implants
- For the above, follow-up with parents is recommended to ensure the student is under the care of a physician and/or audiologist

Hearing screening may be completed via:

- **Pure-tone screening** Screen at **1000 Hz, 2000 Hz, 4000 Hz at 20 dBHL**
  - Include **6000 Hz for 7th & 11th grades** to rule-out noise induced hearing loss
  - This is the gold standard for hearing screening

- Or, **Otoacoustic emissions (OAEs)** may be utilized. OAEs will provide a PASS or FAIL result. OAEs are recommended for students who are unable to complete traditional pure-tone screening (i.e., young age, developmental and/or physical disability preventing accurate responses). **Note**: OAEs are not a replacement for students who can complete pure-tone screening

Some programs may choose to offer an **extended screening**[1], in addition to the above testing. These procedures should be overseen by an audiologist. Below are options to supplement the hearing screening process:

- **Tympanometry**[1] should be performed on all students who fail the rescreen. A "Fail" is any tympanogram in which peak admittance is < 0.2 mmho or tympanometric width greater than 200 daPa

- **Otoscopy**[1] performed on all failed tympanograms to determine the presence of excessive cerumen, otitis media, tympanic membrane perforation and/or pressure equalization tubes

- **Screening results and referral** sent home recommending follow-up with pediatrician/primary care provider on day of rescreening if OM or TM perforation present

Hearing screening Pass and Fail criteria

- **"Pass"** → Student must respond appropriately to all pitches (frequencies) at the screening level 20 dBHL in BOTH ears. For OAEs, the equipment will show a "pass" result.
- **"Fail"** → No response to any pitch (frequency) at 20 dBHL in either ear. For OAEs, the equipment will show a "fail" or "refer" result.
  - A **rescreen** should take place within **4 – 6 weeks**.

- **CNT** (could not test) → lack of cooperation or unable to condition to the screening task. 'CNT' cannot be the final result for Child Find activities. Rescreen again in 1-2 weeks or refer to the school district audiologist, or Utah Schools for the Deaf and the Blind (if applicable).

Follow-up after two failed hearing screenings

- Send screening results home and recommend the student be seen by an audiologist
  - School District audiologist
  - USDB Audiology
  - Clinical audiologist with expertise in testing children

References

American Speech-Language-Hearing Association (1997). Guidelines for Audiologic Screening. http://www.asha.org/PRPPrintTemplate.aspx?folderid=8589935406

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Roush, J. & Corbin, N. (2017) "Screening for Hearing Loss and Middle Ear Disorders: Beyond the Newborn Period" in Tharpe, A.M. & Seewald, R. (2017 Eds.), *Comprehensive Handbook of Pediatric Audiology*

Utah Code

Effective 5/3/2023

53G-9-402. Rules for examinations prescribed by the Department of Health and Human Services -- Notification of impairment.

(1) (a) Each local school board shall implement policies as prescribed by the Department of Health and Human Services for vision, dental, abnormal spinal curvature, and hearing examinations of students attending the district's schools.

(b) Under guidelines of the Department of Health and Human Services, qualified health professionals shall provide instructions, equipment, and materials for conducting the examinations.

(c) The policies shall include exemption provisions for students whose parents contend the examinations violate their personal beliefs.

(2) The school shall notify, in writing, a student's parent of any impairment disclosed by the examinations.

Amended by Chapter 328, 2023 General Session

Utah school district audiologists

Note: This list is current as of 5.1.24. Please email swnek@utah.gov with any known updates.

Cache County School District

Steve Jensen steven.jensen@ccsdut.org
Makynzie Larsen Makynzie.Larsen@ccsdut.org

Logan School District

Steve Jensen – steven.jensen@loganschools.org
Makynzie Larsen makynzie.larsen@loganschools.org
*You can dmail both the ccsdut.org and loganschool.org email addresses. They are contracted for both school districts.

Ogden School District - None - USDB

Weber School District - 23-24 school year USDB – Devin Christensen

Davis School District

Josh Roylance jroylance@dsdmail.net

Tooele School District - USDB – Barrett Ray

Salt Lake School District

Kylie Madsen kylie.madsen@slcschools.org

Granite School District - 2500 S State St; Rm - Special Services; 385-646-1284

Paige Morisak pemorisak@graniteschools.org
Mandy Smith mjsmith@graniteschools.org

Canyons School District – 23-24 school year USDB

Jordan School District

Lynette Roper lynette.roper@jordandistrict.org
Jenny Pedersen Jenny.Pedersen@jordandistrict.org
Melanie Hill melanie.hill@jordandistrict.org
Cailey Mortensen cailey.mortensen@jordandistrict.org
Sadie Schilaty sadie.schilaty@jordandistrict.org

Alpine School District

Alison Ediger aediger@alpinedistrict.org

Provo School District

Jeramy Jenkins jeramyj@provo.edu

Nebo School District

Candi Bown candi.bown@nebo.edu

Utah Schools for the Deaf and the Blind – Audiological Services

If your school district is not listed, or you have questions regarding audiological services, referrals, or loaner hearing aids, contact Sarah Owens at saraho@usdb.org.

Devin Christensen	devinc@usdb.org	(Ogden Campus)
Barrett Ray	barretr@usdb.org	(Salt Lake Campus)
Sarah Owens	saraho@usdb.org	(telework)
Janeal Belnap	janealb@usdb.org	(Utah County)
Stefani Watson	stefaniw@usdb.org	(St. George Campus)
Samantha Snow	samanthas@usdb.org	(Salt Lake Campus)
Tyler Sorensen	tylers@usdb.org	(Ogden Campus)